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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKETT NO.
10583732	09/25/2007	Fabian Doling	P23273

EXAMINER
IQBAL, SYED TAHA

ART UNIT	PAPER NUMBER
1793	

DATE MAILED:

EXAMINER INTERVIEW SUMMARY RECORD

All participants (applicant, applicant's representative, PTO personnel):

(1) Syed Iqbal (3) Ed Garcia

(2) Wayne Langel (4) Dinh Nguyen

Date of Interview 05/11/09

Type: ☐ Telephonic ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description: _____

Agreement ☐ was reached with respect to some or all of the claims in question. ☒ was not reached.

Claims discussed: all

Identification of prior art discussed: As cited in last office action

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: participants proposed amended claims, as attached hereto Mr. Garcia further proposed limiting the reforming step to partial oxidation, autothermic reforming or vapor reforming as recited in claim 22. The incorporation of claim 28 (continued pg 2)

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☒ 1. It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph below has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☐ 2. Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the substance of the interview unless box 1 above is also checked.

Wayne C. Langel
Examiner's Signature

PTOL-413 (REV. 2 -93)

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKETT NO.
10583732			P23272

EXAMINER
SYED IQBAL

ART UNIT	PAPER NUMBER

DATE MAILED:

EXAMINER INTERVIEW SUMMARY RECORD

All participants (applicant, applicant's representative, PTO personnel):

(1) _____ (3) _____

(2) _____ (4) _____

Date of interview _____

Type: ☐ Telephonic ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description: _____

Agreement ☐ was reached with respect to some or all of the claims in question. ☒ was not reached.

Claims discussed: _____

Identification of prior art discussed: _____

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: (cont'd from pg 1) into claim 18 was also discussed.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☒ 1. It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph below has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☐ 2. Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the substance of the interview unless box 1 above is also checked.

Wayne A. Langel
Examiner's Signature

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IN THE CLAIMS

A copy of all pending claims follows with each claim including a status identifier pursuant to 37 CFR 1.121.

Claims 1-17 (Cancelled)

18. (Currently Amended) A method for generating at least one energy from the group consisting of process heat and electrical energy ~~for a machine for at least one of production and finishing of a fibrous web~~, comprising:

generating from waste products resulting during the at least one of production and finishing of a fibrous web a hydrogen-rich gas having a ~~highest possible~~ high proportion of hydrogen; and

utilizing the hydrogen-rich gas for generating the at least one of process heat and electrical energy.

19. (Previously Proposed) The method according to claim 18, wherein at least one of bark, fibers, and edge cuttings are utilized as waste products.

20. (Previously Proposed) The method according to claim 18, further comprising utilizing at least one of:

i) the waste products which are first transformed into methanol; and

ii) a DMFC (Direct Methanol Fuel Cell).

21. (Previously Proposed) The method according to claim 18, further comprising first feeding the waste products utilized to a reformer.

22. (Previously Proposed) The method according to claim 21, further comprising transforming hydrogen carbons of the waste products utilized into a hydrogen-rich and a carbon monoxide-rich gas by the reformer through one of, autothermic reforming, partial oxidation, and vapor reforming.

23. (Previously Proposed) The method according to claim 21, wherein the reformer is followed by a shift stage for transforming carbon monoxide into another hydrogen-rich gas.

24. (Previously Proposed) The method according to claim 23, wherein one of the reformer or the shift stage is followed by at least one more process stage for further reduction of carbon monoxide.

25. (Currently Amended) The method according to claim 24, wherein the reformer is followed by the shift stage, and the shift stage is followed by a Pressure Swing Adsorption (PSA) stage ~~a shift stage~~ for pressure swing adsorption as a further process stage.

26. (Currently Amended) The method according to claim 24, wherein the reformer is followed by the shift stage, and the shift stage is followed by a Selective Oxidation (SelOx) stage ~~a shift stage~~ for selective oxidation as a further process stage.

27. (Previously Proposed) The method according to claim 18, further comprising feeding to a reformer at least one of additional hydrogen carbons and additional H_2 when the waste products resulting during at least one of production and finishing of the

fibrous web are insufficient to meet an energy requirement.

28. (Previously Proposed) The method according to claim 27, further comprising supplying the additional hydrogen carbons to the reformer in the form of at least one of natural gas, biomass, and wood chips.

29. (Currently Amended) The method according to claim 18, further comprising generating the at least one ~~of process heat and electrical~~ energy at a point of the machine at which the at least one ~~of the process heat and electrical~~ energy is required.

30. (Currently Amended) The method according to claim 29, further comprising generating the at ~~least one of process heat and electrical~~ energy at least one of on, in or near a particular unit of the machine which is to be one of heated and supplied with electrical energy.

31. (Currently Amended) The method according to claim 18, further comprising generating the least one ~~of process heat and electrical~~ energy by at least one fuel cell from at least one of an acquired hydrogen-rich gas and additional hydrogen taken from at least one of a grid or tank.

32. (Previously Proposed) The method according to claim 18, further comprising generating the process heat by combusting at least one of an acquired hydrogen, methanol and additional hydrogen taken from at least one of a grid and tank.

33. (Previously Proposed) The method of claim 18, wherein the fibrous web is one of

paper web and paperboard web.

34. (Currently Amended) An apparatus for generating at least one energy selected from the group of process heat and electrical energy for a machine for at least one of production and finishing of a fibrous web, wherein the apparatus is configured to provide a hydrogen-rich gas having a ~~highest possible~~ high proportion of hydrogen generated from waste products resulting during at least one of the production and finishing of the fibrous web, and the apparatus is configured to utilize the hydrogen-rich gas for generating at least one of the process heat and electrical energy.

35. (Previously Proposed) The apparatus of claim 34, wherein the fibrous web is one of paper web and paperboard web and the machine is configured for at least one of the production and finishing of the one of paper web and paperboard web.

36. (Previously Proposed) The apparatus of claim 34, wherein at least one of bark, fibers, and edge cuttings are utilized as waste products and the apparatus is configured to provide the hydrogen-rich gas generated from at least one of the bark, fibers, and edge cuttings.

37. (Previously Presented) The apparatus of claim 34, wherein at least one of:

i) the waste products utilized are first transformed into methanol, and

ii) a DMFC (Direct Methanol Fuel Cell) is utilized, and

the apparatus is configured to utilize at least one of the methanol and DMFC.

38. (Previously Proposed) The apparatus of claim 34, wherein the apparatus comprises a reformer and the reformer is configured to be first fed with the waste products.

39. (Previously Proposed) The apparatus of claim 38, wherein the reformer is configured to transform hydrogen carbons of the waste products into a hydrogen-rich and a carbon monoxide-rich gas through one of, autothermic reforming, partial oxidation, and vapor reforming.

40. (Previously Proposed) The apparatus of claim 38, wherein the apparatus comprises a shift stage for transforming carbon monoxide into another hydrogen-rich gas and is followed by the reformer.

41. (Previously Proposed) The apparatus of claim 38, wherein the apparatus comprises at least one more process stage for further reduction of carbon monoxide and follows one of the reformer or a shift stage.

42. (Previously Proposed) The apparatus of claim 41, wherein the reformer is followed by the shift stage for one of, (a) pressure swing adsorption and (b) selective oxidation, as a further process stage.

43. (Previously Proposed) The apparatus of claim 34, wherein the apparatus is configured to feed at least one of additional hydrogen carbons and additional H_2 to a reformer when the waste products resulting during at least one of the production and finishing of the fibrous web are insufficient to meet an energy requirement.

44. (Previously Proposed) The apparatus of claim 43, wherein the reformer is configured to be supplied with additional hydrogen carbons in the form of at least one of natural gas, biomass, and wood chips.

45. (Previously Proposed) The apparatus of claim 34, wherein the apparatus is configured to generate the at least one of process heat and electrical energy at a point of the machine at which the at least one of the process heat and electrical energy is required.

46. (Previously Proposed) The apparatus of claim 45, wherein the apparatus is configured to generate the at least one of process heat and electrical energy at least one of on, in or near a particular unit of the machine that is to be one of heated or supplied with electrical energy.

47. (Previously Proposed) The apparatus of claim 34, wherein the apparatus comprises at least one fuel cell and is configured to generate the at least one of process heat and electrical energy by at least one fuel cell from at least one of an acquired hydrogen-rich gas and additional hydrogen taken from at least one of a grid or tank.

48. (Previously Proposed) The apparatus of claim 34, wherein the apparatus is configured to generate the process heat by combusting at least one of an acquired hydrogen, methanol and additional hydrogen taken from at least one of a grid and tank.

49. (Currently Amended) A method for generating at least one energy from the group consisting of process heat and electrical energy for a machine for at least one of production and finishing of a fibrous web, comprising: generating a hydrogen-rich gas having a ~~highest possible~~ high proportion of hydrogen from waste products resulting during the at least one of production and finishing of a fibrous web, the hydrogen-rich

gas being utilized for generating at least one ~~of a necessary process heat and a necessary electrical~~ energy, and hydrogen carbons of the waste products utilized being transformed into a hydrogen-rich and a carbon monoxide-rich gas by a reformer through at least one of autothermic reforming, partial oxidation, and vapor reforming.

50. (Currently Amended) An apparatus for generating at least one energy selected from the group consisting of process heat and electrical energy for a machine for at least one of production and finishing of a fibrous web, wherein

the apparatus is configured to provide a hydrogen-rich gas having a ~~highest possible~~ high proportion of hydrogen generated from waste products resulting during the at least one of production and finishing of a fibrous web,

the apparatus is configured to utilize the hydrogen-rich gas for generating at least one of a necessary process heat and a necessary electrical energy,

the apparatus comprises a reformer and the reformer is configured to be first fed with the waste products, and

the reformer is configured to transform hydrogen carbons of the waste products into a hydrogen-rich and a carbon monoxide-rich gas through at least one of autothermic reforming, partial oxidation, and vapor reforming.